815 KAR 20:078. Storage and installation of SDR 11, CPVC plastic pipe and fittings.

RELATES TO: KRS 318.010, 318.015, 318.130, 318.150
STATUTORY AUTHORITY: KRS 318.130
NECESSITY, FUNCTION, AND CONFORMITY: KRS 318.130 requires the office, after review by the State Plumbing Code committee, to promulgate an administrative regulation establishing the Kentucky State Plumbing Code regulating plumbing, including the methods and materials that may be used in Kentucky. This administrative regulation establishes the methods of storage, handling and installation of standard dimension ratio (SDR) 11, chlorinated polyvinyl chloride (CPVC) plastic pipe and fittings.

Section 1. Storage and Handling. (1) Chlorinated polyvinyl chloride (CPVC) pipe, tubing, and fittings shall be stored under cover to avoid unnecessary dirt accumulation and long-term exposure to sunlight. Pipe and tubing shall be stored with continuous support in straight, uncrossed bundles. Care shall be used in handling to avoid unnecessary abuse such as abrasion on concrete or crushing.

(2) Solvent cement and primers, because of flammability, shall be stored in an area where there shall be no exposure to ignition, sparks, open flames, or heat. Solvent cement and primers shall not be used beyond their marked shelf life.

Section 2. Installation. Correct assembly shall consist of the following steps:

(1) Cutting the pipe square;

(2) Removing burrs;

(3) Cleaning both pipe end and fitting socket with a recommended CPVC cleaner, unless using an approved one (1) step cement;

(4) Applying a liberal coat of CPVC solvent cement to the pipe and apply a light coat of cement to the fitting socket; removing all excess cement from the interior which may clog the waterway;

(5) Assembling immediately by bottoming the pipe in the socket and rotating one-quarter (1/4) turn as the joint is assembled;

(6) Removing excess cement from the joint; and

(7) Determining if the joint has been properly assembled by looking for a small bead of cement to appear at the junction between the pipe or tubing and the fitting.

Section 3. Installation Temperature. Extra care shall be taken if installing in temperatures below forty (40) degrees Fahrenheit or above 110 degrees Fahrenheit. The manufacturer's installation instructions shall be followed carefully.

Section 4. Hangers and Supports. Support shall be provided at each floor level for piping installed in vertical runs. For horizontal runs, support shall be provided at three (3) foot intervals for pipe one (1) inch or less in diameter and at four (4) foot intervals for larger pipe sizes. Piping shall not be anchored tightly to a support but secured with smooth straps or hangers allowing for movement caused by expansion and contraction. Hangers shall not have rough or sharp edges that come in contact with the piping.

Section 5. CPVC-to-metal Transitions. CPVC threaded adapters shall not be used to transition from CPVC to metal. Union type fittings that use gaskets or o-rings to seal dissimilar connections shall not be used. Compression type transition fittings, over-molded transition fittings and push-type fittings that meet the ASSE 1061 standard may be used.

Section 6. Thermal Expansion. The linear thermal expansion rate for CPVC is approximately one-half (1/2) inch for each ten (10) degrees Fahrenheit temperature change for each 100 feet of pipe or tubing. If installing long runs of pipe, one-sixteenth (1/16) to three thirty-seconds (3/32) inch longitudinal clearance shall be allowed per foot of run to accommodate thermal expansion. Offsets of twelve (12) inches or more every ten (10) feet shall be included on vertical risers if they are restrained by horizontal branches at each floor. (18 Ky.R. 3561; eff. 8-1-92; Am. 22 Ky.R. 799; eff. 12-7-95; 33 Ky.R. 406; 34 Ky.R. 34; eff. 7-13-2007.)